

IN THE CLAIMS:

Please substitute the following listing of claims for the previous listing of claims.

1. (Currently amended) A magnet assembly for a plasma process chamber comprising a wall, the magnet assembly comprising:
 - (a) a hollow collar comprising a radially internal and external surface, and a cross-section that is absent seams, the collar having a gap extending from about the radially internal surface to about the external surface, the gap defining opposing faces, at least one face having an open end, and the collar sized to diametrically expand and snap fit a the wall of the process chamber so that the radially internal surface directly contacts the process chamber wall;
 - (b) a cap to seal the at least one open end face; and
 - (c) a plurality of magnets in the hollow collar, the magnets being insertable through the open end face.
2. (Cancelled)
3. (Previously presented) A magnet assembly according to claim 1 wherein the hollow collar is shaped to fit into a corresponding groove on the wall of the process chamber.
4. (Original) A magnet assembly according to claim 3 further comprising a retaining ring to retain the hollow collar in the groove of the wall of the process chamber.

5. (Previously presented) A magnet assembly for according to claim 1 further comprising a key on the external surface of the hollow collar to couple to a corresponding slot on a surface of the wall of the process chamber.

6. (Original) A magnet assembly according to claim 1 wherein the plurality of magnets abut one another to generate an annular magnetic field about the process chamber.

7. (Original) A magnet assembly according to claim 1 wherein the plurality of magnets are positioned in the hollow collar such that their south poles are directed upwardly and the north poles are directed downwardly.

8. (Previously presented) A magnet assembly according to claim 1 wherein the plurality of magnets are positioned in the hollow collar such that the magnetic axes of the magnets are oriented perpendicular to the wall of the process chamber.

9. (Previously presented) A magnet assembly according to claim 8 wherein the plurality of magnets are positioned such that a first set of magnets have their magnetic axis oriented in one direction, and a second set of magnets have their magnetic axis oriented in the opposite direction.

10. (Original) A magnet assembly according to claim 9 further comprising one or more pole pieces coupling the first and second set of magnets.

11. (Original) A magnet assembly according to claim 9 further comprising a separator wall between the first and second sets of magnets.

12. (Previously presented) A magnet assembly of claim 1 comprising a plurality of hollow collars, wherein each hollow collar is a segment of a ring sized to fit around the wall of the process chamber.

13. (Original) A plasma process chamber comprising at least one wall having the magnet assembly of claim 1 fitted thereon, the process chamber further comprising:

- (i) a substrate support;
- (ii) a gas supply to provide process gas;
- (iii) a gas energizer to energize the process gas; and
- (iv) an exhaust to exhaust the process gas.

14. (Original) A chamber according to claim 13 wherein the wall of the chamber comprises a groove to receive the magnet assembly.

15. (Cancelled)

16. (Currently amended) A chamber according to claim [[1]] 13 comprising a pair of concentric walls that each comprise a magnet assembly.

17. (Previously presented) A chamber according to claim 16 wherein in one of the magnet assemblies, the plurality of magnets are positioned in the hollow collar such that the magnetic axes of the magnets are oriented perpendicular to the wall of the process chamber; and wherein in the other magnet assembly, the plurality of magnets are positioned such that a first set of magnets have their magnetic axes oriented in one direction, and a second set of magnets have their magnetic axes oriented in the opposite direction.

18-20. (Cancelled)

21. (Currently amended) A magnet assembly for a plasma process chamber comprising a wall having a groove, the magnet assembly comprising:

- (a) a hollow collar comprising a radially internal and external surface, and a cross-section that is absent seams, the collar having a gap extending from about the radially internal surface to about the external surface, the gap defining opposing faces, at least one face having an open end, and the collar sized to diametrically expand and snap fit a the wall of the process chamber so that the radially internal surface directly contacts the process chamber wall;
- (b) a cap to seal the at least one open end face;
- (c) a plurality of magnets positioned in the hollow collar such that the magnetic axes of the magnets are oriented perpendicular to a the wall of the process chamber; and
- (d) a retaining ring to retain the hollow collar in the groove of the ~~liner~~ wall of the process chamber.

22. (Currently amended) A magnet assembly according to claim 21 further comprising a key on the external surface of the hollow collar to couple to a corresponding slot on a surface of the ~~liner~~ wall of the process chamber.

23. (Previously presented) A magnet assembly according to claim 21 wherein the plurality of magnets are positioned such that a first set of magnets have their magnetic axes oriented in one direction, and a second set of magnets have their magnetic axes oriented in the opposite direction.

24. (Currently amended) A magnet assembly for a plasma process chamber comprising a wall, and a liner having a groove, the magnet assembly comprising:

(a) a hollow collar comprising a radially internal and external surface, and a cross-section that is absent seams, the collar having a gap extending from about the radially internal surface to about the external surface, the gap defining opposing faces, at least one face having an open end, and the collar sized to diametrically expand and snap fit ~~[[a]]~~ the groove of ~~[[a]]~~ the liner of the process chamber so that the radially internal surface directly contacts the liner;

(b) a cap to seal the at least one open end face;

(c) a plurality of magnets in the hollow collar that abut one another to generate an annular magnetic field about the process chamber, the magnets being positioned in the hollow collar such that their magnetic axes are oriented perpendicular to the wall of the process chamber; and

(d) a key on the external surface of the hollow collar to couple to a corresponding slot on a surface of the liner of the process chamber.

25. (Previously presented) A magnet assembly according to claim 24 wherein the plurality of magnets are positioned such that a first set of magnets have their magnetic axes oriented in one direction, and a second set of magnets have their magnetic axes oriented in the opposite direction.

26. (Previously presented) A magnet assembly according to claim 25 further comprising a separator wall between the first and second sets of magnets.

27. (Previously presented) A liner assembly for a process chamber comprising a wall, the liner assembly comprising:

- (a) a liner having a groove; and
- (b) a magnet assembly comprising:
 - (i) a hollow collar comprising a radially internal and external surface, and a cross-section that is absent seams, the collar having a gap extending from about the radially internal surface to about the external surface, the gap defining opposing faces, at least one face having an open end, and the collar sized to diametrically expand and snap fit the groove of the liner so that the radially internal surface directly contacts the liner;
 - (ii) a cap to seal the at least one open end face; and
 - (iii) a plurality of magnets in the hollow collar, the magnets being insertable through the open end face.

28. (Currently amended) A ~~magnet~~ liner assembly according to claim 27 further comprising a retaining ring to retain the hollow collar in the groove of the liner.

29. (Currently amended) A ~~magnet~~ liner assembly according to claim 27 further comprising a key on the external surface of the hollow collar to couple to a corresponding slot on a surface of the liner.

30. (Previously presented) A wall assembly for a process chamber, the wall assembly comprising a wall having a groove and the magnet assembly of claim 1 fitted to the groove.

31. (Previously presented) A magnet assembly according to claim 1 wherein the hollow collar comprises a single continuous curve extending at least about 180 degrees.

32. (Previously presented) A magnet assembly according to claim 21 wherein the hollow collar comprises a single continuous curve extending at least about 180 degrees.

33. (Previously presented) A magnet assembly according to claim 24 wherein the hollow collar comprises a single continuous curve extending at least about 180 degrees.

34. (Previously presented) A liner assembly according to claim 27 wherein the hollow collar comprises a single continuous curve extending at least about 180 degrees.

35. (New) A magnet assembly according to claim 1 wherein the wall is a liner.

36. (New) A magnet assembly according to claim 21 wherein the wall is a liner.